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NEWS 6 SEP 09 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS 7 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS 8 OCT 21 Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS 9 OCT 21 Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
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NEWS 11 NOV 23 Annual Reload of IFI Databases
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NEWS 13 DEC 01 DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS 14 DEC 02 Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS 15 DEC 02 PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS 16 DEC 02 USGENE: Enhanced coverage of bibliographic and sequence information
NEWS 17 DEC 21 New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/Caplus
NEWS 18 JAN 12 Match STN Content and Features to Your Information Needs, Quickly and Conveniently
NEWS 19 JAN 25 Annual Reload of MEDLINE database
NEWS 20 FEB 16 STN Express Maintenance Release, Version 8.4.2, Is Now Available for Download
NEWS 21 FEB 16 Derwent World Patents Index (DWPI) Revises Indexing of Author Abstracts
NEWS 22 FEB 16 New FASTA Display Formats Added to USGENE and PCTGEN INPADOCDB and INPAFAMDB Enriched with New Content and Features

NEWS 24 FEB 16 INSPEC Adding Its Own IPC codes and Author's E-mail Addresses

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,
AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

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FILE 'AGRICOLA' ENTERED AT 18:22:27 ON 04 MAR 2010

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=> s prepare? (S) monoglyceride
L1           914 PREPARE? (S) MONOGLYCERIDE

=> s l1 and (control? (s) water (s) after (s) reaction)
L2           0 L1 AND (CONTROL? (S) WATER (S) AFTER (S) REACTION)

=> s l1 and (maintain? (s) water (w) level)
L3           0 L1 AND (MAINTAIN? (S) WATER (W) LEVEL)

=> s l1 and (water (4w) level)
L4           0 L1 AND (WATER (4W) LEVEL)

=> s l1 and (water (s) reaction?)
L5           17 L1 AND (WATER (S) REACTION?)

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-> d 15 1-10 ibib abs
L5 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:1310470 CAPLUS
DOCUMENT NUMBER: 151:489554
TITLE: Method for synthesizing glyceryl citrate in
multi-stage fixed-bed reactor with catalysis of

INVENTOR(S): immobilized lipase
 Shan, Liang; Jin, Qingzhe; Liu, Yuanfa; Wu, Xiaojuan;
 Wang, Xinguo; Pan, Qiuqin; Huang, Jianhua; Song,
 Zhihua
 PATENT ASSIGNEE(S): Jiangnan University, Peop. Rep. China
 SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 6pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101560530	A	20091021	CN 2009-10027527	20090511
PRIORITY APPLN. INFO.:			CN 2009-10027527	20090511
OTHER SOURCE(S):	CASREACT 151:489554			
AB	The title method comprises the steps of: (1) orderly filling each stage of a multi-stage fixed-bed reactor with glass beads, immobilized lipase, and glass beads, setting a mol. sieve filling column (regenerated in certain time) in each stage, and keeping the temperature at 40-60°, (2) dissolving glycerol monoglyceride and anhydrous citric acid with a uniform solvent (anhydrous isopropanol, anhydrous isooamyl alc., or anhydrous tert-amyl alc.) to prepare 0.1-0.3 mol/L solns., (3) performing an esterification reaction for 50-60 h while controlling the mol. ratio of citric acid to glycerol monoglyceride at (1:3)-(3:1), and lipase 5-20 weight% of total reaction substrates, (4) vacuum-distilling to remove the organic solvent at 100-120 rpm, vacuum degree 0.05-0.1 MPa, and 75-85%, and (5) filtering while hot, washing the oil phase with hot water, cooling the oil phase, and vacuum-drying. In step 2, the glycerol monoglyceride is treated by mol. distillation, and has a monoglyceride content of 98% or higher and a C16-18 fatty acid content of 98% or higher, and the organic solvent is treated by mol. sieve for dewatering. The immobilized lipase is selected from Rhizomucor miehei, Candida antarctica, and Aspergillus niger. The method has the advantages of mild reaction conditions, high specificity, few byproducts, and high conversion rate.			

L5 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2009:210111 CAPLUS
 DOCUMENT NUMBER: 150:281766
 TITLE: Environment-friendly water retaining agent for producing shiitake fungus
 INVENTOR(S): He, Jianxin; Mo, Liangen; Chu, Meifang
 PATENT ASSIGNEE(S): Hangzhou Minsheng Gelatin Producing Co., Ltd., Peop. Rep. China
 SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 6pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101368081	A	20090218	CN 2008-10097535	20080512
PRIORITY APPLN. INFO.:			CN 2008-10060837	A 20080321

AB An environment-friendly water retaining agent for producing shiitake fungus sticks is prepared from stearic acid, monoglyceride and glycerol extracted from vegetable oil by mixing at a ratio of stearic acid/monoglyceride/glycerol of 0.85:0.1:0.05, reacting in a reaction kettle while heating and stirring for 1 h, filtering, cooling to solidify, pulverizing, and packaging. The water retaining agent has the advantages of good water-retaining performance, environment friendliness and no toxic residue.

L5 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1150670 CAPLUS

DOCUMENT NUMBER: 149:330136

TITLE: The manufacturing method of the medium-chain and long-chain fatty acid monoglyceride

INVENTOR(S): Miyawaki, Hideaki; Tanaka, Yasuo; Kanetani, Shuji; Shimada, Hiroshi; Nagao, Toshihiro; Nishimura, Yoshi; Kobayashi, Takashi

PATENT ASSIGNEE(S): Taiyo Corporation, Japan; Osaka City
SOURCE: Jpn. Kokai Tokkyo Koho, 15pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008220236	A	20080925	JP 2007-61683	20070312
PRIORITY APPLN. INFO.:			JP 2007-61683	20070312

AB The title monoglyceride is prepared from fatty acid and glycerol by esterification with lipase. When the esterification reaches 60%, the water content in the reaction mixture is controlled at 0.3-2.5 weight%. The fatty acid is selected from C9:0 to C18:0, oleic acid, linoleic acid, and linolenic acid.

L5 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:311903 CAPLUS

DOCUMENT NUMBER: 143:27213

TITLE: Synthesis of water-reducible acrylic-alkyd resins based on modified palm oil

AUTHOR(S): Saravari, O.; Phapant, P.; Pimpan, V.

CORPORATE SOURCE: Department of Materials Science, Faculty of Science, Chulalongkorn University, Bangkok, 10330, Thailand

SOURCE: Journal of Applied Polymer Science (2005), 96(4), 1170-1175

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Water-reducible acrylic-alkyd resins were synthesized from the reaction between monoglycerides prepared from modified palm oil and carboxy-functional acrylic copolymer followed by neutralization of carboxyl groups with diethanolamine. Modified palm oil was produced by interesterification of palm oil with tung oil at a weight ratio of 1: 1, using sodium hydroxide as a catalyst, whereas carboxy-functional acrylic copolymer was prepared by radical copolymer. of Bu methacrylate and maleic anhydride. The amount of acrylic copolymer used was

from 15 to 40% by weight, and it was found that homogeneous resins was obtained when the copolymer content was 20-35 wt%. All of the prepared water-reducible acrylic-alkyd resins were yellowish viscous liqs. Their films were dried by baking at 190°C and their properties were determined. These films showed excellent water and acid resistance and good alkali resistance.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)
 REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2004270020 CAPLUS
 DOCUMENT NUMBER: 140:309373
 TITLE: Transdermal compositions containing tertiary amides and ion pairs of quaternary ammonium salts and fatty acids
 INVENTOR(S): Bettle, Griscom, III; Coury, William S.
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 110 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004026259	A2	20040401	WO 2003-US29746	20030922
WO 2004026259	A3	20041104		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003299034	A1	20040408	AU 2003-299034	20030922
US 20040122105	A1	20040624	US 2003-670034	20030922
PRIORITY APPLN. INFO.:			US 2002-412437P	P 20020920
			WO 2003-US29746	W 20030922

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 140:309373

AB The present invention is directed to transdermal compns. that include at least one of the following components: a Cl-6 dialkyl quaternary ammonium salt, a Cl2-30 fatty acid, a nitrogenous organic base, Cl2-30 fatty alc., monoglyceride or their reaction products, i.e., tertiary amides and ion pairs prepared by the reaction of quaternary ammonium salts and fatty acids. The compns. are useful for treatment of sun-damaged skin. For example, 1200 g distilled water, 57 g conjugated linoleic acid (CLA), and 5.5 g triethanolamine (TEA) were mixed together and heated to 80°. Di-Me distearyl ammonium chloride (DDAC, 120 g) was added at a rate of 20 g/10 min. After the last DDAC addition, heating was continued at 80° for 10 min or until the gas release was

complete. The cooled product was a white precipitate, i.e., distearyl linoleamide, that rubs into the skin in about 20 s. There is no residual odor on the skin. The skin has an obvious coating on it with a perceived coefficient of friction greater than the untreated skin.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

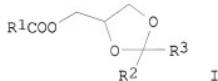
L5 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2003:542699 CAPLUS
 DOCUMENT NUMBER: 139:275855
 TITLE: Microemulsions as microreactors for food applications
 AUTHOR(S): Garti, Nissim
 CORPORATE SOURCE: Casali Institute of Applied Chemistry, Givat Ram Campus, The Hebrew University of Jerusalem, Jerusalem, 91904, Israel
 SOURCE: Current Opinion in Colloid & Interface Science (2003), 8(2), 197-211
 CODEN: COCSFL; ISSN: 1359-0294
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English
 AB A review. Structured self-assembled liqs. have been considered as efficient microreactors for organic and enzymic reactions. Only recently scientists learned to use food-grade cosolvents and coemulsifiers together with hydrophilic non-ionic surfactants and to construct U-type phase diagrams with large isotropic regions ranging continuously from the oil-rich corner to the water-rich corner without any phase separation. The U-type microemulsions facilitate triggering and control of certain reactions by changing water activities. Maillard thermal degradation between sugars and amino acids is the main, and almost the only, chemical reaction that was studied in food-grade microemulsions. Some examples of recent studies include: Maillard processes in binary structured fluids composed of monoglycerides of fatty acids and water forming microemulsions and lyotropic liquid crystalline structures; pseudoternary and pseudoquaternary W/O microemulsions; U-type microemulsions (W/O, O/W and bicontinuous microemulsions); enzymic reactions aimed to prepare other surfactants such as sugar esters, monoglycerides and lyssolecithins or triglycerides. Reactions in microreactors lead to unique new products. The reaction products and rates are controlled by the hydrophilicity/lipophilicity of the reagents (guest mols.), their molar ratios, type of oil phase, nature of surfactants and oil/surfactant ratios, nature of curvature and its elasticity (adjusted by cosolvent and coemulsifier) and by the water activity. The field is in its infancy and will need work of many more model reactions before it will be used in industrial food applications. Enzymic reactions in non-food microemulsions are common practice but only few examples of food microemulsions as enzymic microreactors were extensively studied.

OS.CITING REF COUNT: 30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)
 REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2002:169594 CAPLUS

DOCUMENT NUMBER: 136:232285
TITLE: Method for preparation of monoglyceride ketals by reaction of fats with glycerin and ketone or aldehyde in presence of acid
INVENTOR(S): Imanaka, Takehiro; Tanaka, Toshinori; Tahara, Hideo; Nagumo, Hiroshi
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
JP 2002069068	A	20020308	JP 2000-258770	20000829
PRIORITY APPLN. INFO.:			JP 2000-258770	20000829
OTHER SOURCE(S):	MARPAT	136:232285		
GI				



AB High-purity monoglyceride ketals [I; R1 = (un)saturated C5-23 aliphatic hydrocarbyl; R2, R3 = H, linear or branched Cl-22 alkyl or alkenyl, C6-30 aryl (optionally substituted by alkyl); or R2 and R3 are linked to each other to form a ring; provided that a total number of C atoms in R2 and R3 is ≥3] are efficiently prepared by reaction of fats of formula R1CO2CH2CH(O2CR1)CH2O2CR1 (R1 is same or different and defined as above), aldehyde or ketones of formula R2COR3 (R2, R3 = same as above), and glycerin in the presence of an acid catalyst. Deketalization of monoglyceride ketals I gives monoglycerides of formula R1CO2CH2CH(OH)CH2OH which are useful as emulsifiers, foaming agents, and moisturizers for cosmetics, industrial emulsifiers, or plastic additives. This process involves one-pot acetalization or ketalization of glycerin with aldehyde or ketone followed by transesterification of the resulting glycerin cyclic ketals with fats. Thus, refined-bleached-deodorized (RBD) coconut oil 158.1, glycerin 137.7, Me Et ketone 186.6, heptane 125.0, and p-toluenesulfonic acid monohydrate 6.56 g were placed in a flask and allowed to react at 82-103° for 20 h with removing water, neutralized with 48.5% aqueous KOH, and distilled under reduced pressure at pressure of 6.66 kPa and room temperature to 100° to distill off heptane and excess Me Et ketone and at pressure of 0.67 kPa and 100-140° to distill off (2-ethyl-2-methyl-1,3-dioxolan-4-yl)methanol. The distillation residue was washed three-times with water at 50-60° and heated at 50° to remove water to give 92.5% monoglyceride ketal containing coconut oil fatty acids (91.5% purity) which (200.0 g) and 6.00 g acidic white clay (Galeon Earth NV, Mizusawa Chemical Corp., Japan)

was heated at 70° for deketalization while introducing steam inside the reaction system in 2-4% of the monoglyceride ketal with removing Me Et ketone formed and excess steam outside the reaction system for 5 h. The reaction mixture was neutralized by 6.00 g Kyowa 600S (Kyowa Chemical Corp., Japan), heated at 70° to remove water, and filtered to remove the neutralization product to give 86.9% monoglyceride containing coconut oil fatty acids consisting of C6 0.3, C8 4.27, C10 3.42, C12 43.13, C14 14.17, C16 7.17, and C18 fatty acid 16.02% (89.9% purity).

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L5 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:453453 CAPLUS

DOCUMENT NUMBER: 135147925

TITLE: Preparation of high-purity diglyceride

INVENTOR(S): Sugiura, Masakatsu; Yamaguchi, Hiroaki; Yamada, Naoto

PATENT ASSIGNEE(S): KAO Corp., Japan

SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20010004462	A1	20010621	US 2000-725571	20001130
JP 2001163795	A	20010626	JP 1999-359794	19991217
JP 3853552	B2	20061206		
EP 1111064	A1	20010627	EP 2000-124342	20001117
EP 1111064	B1	20010013		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: JP 1999-359794 A 19991217

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The diglyceride is prepared at high yield in short period of time by esterification reacting an acyl group donor selected from a fatty acid and/or its lower alc. ester (e.g., oleic acid) with an acyl group acceptor selected from glycerol and/or a monoglyceride (e.g., glycerol) to form a reaction fluid in an enzyme-packed tower containing 1,3-position-selective immobilized enzyme [e.g., Lipozyme IM (lipase)], reducing a water content or a lower alc. content in the reaction fluid, and recirculating the reaction fluid to the enzyme-packed tower, wherein a residence time of the reaction fluid in the enzyme-packed tower <120 s.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

L5 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:316205 CAPLUS

DOCUMENT NUMBER: 133:75364

TITLE: Novel synthesis of carboxy-functional soybean acrylic-alkyd resins for water-reducible coatings

AUTHOR(S): Wang, Changchun; Lin, Geng; Pae, Joan-Hwan; Jones, Frank N.; Ye, Huijuan; Shen, Weidian

CORPORATE SOURCE: Eastern Michigan University, Ypsilanti, MI, 48197, USA

SOURCE: Journal of Coatings Technology (2000), 72(904), 55-61
 CODEN: JCTEDL; ISSN: 0361-8773

PUBLISHER: Federation of Societies for Coatings Technology
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A new process was developed for synthesis of alkyd resins in which a conventional monoglyceride is reacted with a carboxy-functional acrylic copolymer. The novel products are called acrylic alkyd resins. The carboxy-functional acrylic copolymers were synthesized by solution-free radical polymerization. Gelation during alkyd resin synthesis was avoided by:

(1) limiting the mol. weight of the acrylic copolymers to Mn 3500-5000 and (2) limiting the number average functionality to about 6.5-10 carboxyl groups per mol. Further, the carboxyl groups were derived from a mixture of acrylic and methacrylic acids (1/1.2 mol ratio) in the expectation that this would help control the process. Three series of acrylic copolymers were prepared from various combinations of acrylic monomers and reacted with a monoglyceride prepared from soybean oil and trimethylolpropane. The composition of the acrylic resin was adjusted to minimize phase separation [observed visually and by scanning probe microscopy (SPM)] within cast films. The most satisfactory results were obtained with copolymers of 62-71 wt% of Me methacrylate, 5-21 wt% of lauryl methacrylate, 7.2 wt% of acrylic acid, and 10.3 wt% of methacrylic acid. In preliminary tests, waterborne coatings made from acrylic-alkyd resins based on these acrylics had excellent stability, with acid nos. changing less than 10% after nine months of storage.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
 (5 CITINGS)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:932955 CAPLUS

DOCUMENT NUMBER: 124:28504

ORIGINAL REFERENCE NO.: 124:5483a,5486a

TITLE: Low-calorie triglyceride synthesis by lipase-catalyzed esterification of monoglycerides

AUTHOR(S): McNeill, G. P.; Sonnet, P. E.

CORPORATE SOURCE: USDA, ARS, Philadelphia, PA, 19118, USA

SOURCE: Journal of the American Oil Chemists' Society (1995), 72(11), 1301-7

CODEN: JAOCAT; ISSN: 0003-021X

PUBLISHER: AOCS Press

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 124:28504

AB Monoglycerides of erucic acid (C22:1,Δ13), prep'd. by conventional methods, were reacted with caprylic acid (octanoic acid, C8:0) by using lipases as catalysts with the intention of synthesizing a triglyceride that contains two mols. of caprylic acid and one mol. of erucic acid (caprucin). The reaction was carried out by mixing lipase powder, a small quantity of water, and the reactants in a temperature-controlled stirred batch reactor. Organic solvents or emulsifying agents were not required. When the nonspecific lipase from *Pseudomonas cepacia* was used, a yield of approx. 37% caprucin was obtained, together with a complex mixture of di- and triglycerides that resulted from the random transesterification of the erucic acid. The fatty acid-specific

lipase from Geotrichum candidum promoted minimal transesterification of erucic acid and resulted in a yield of 75% caprucin and approx. 10% interesterification products. Lipase from Candida rugosa exhibited a similar, although less pronounced, specificity to that from G. candidum and promoted more transesterification of erucic acid. Optimum conditions for G. candidum lipase were at 50°C and an initial water content of 5.5%. After the reaction, erucic acid was converted to behenic acid by hydrogenation, thereby converting caprucin into caprenin, a com. available low-calorie triglyceride.

OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)

=> d 15 11 - 17 ibib abs
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DALL ----- ALL, delimited (end of each field identified)
DMAZ ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
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e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS

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IALL ----- ALL, indented with text labels
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OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

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its structure diagram

HITSEQ ----- HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and its structure diagram
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields
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L5 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1995:292084 CAPLUS
 DOCUMENT NUMBER: 122:316964
 ORIGINAL REFERENCE NO.: 122:57613a,57616a
 TITLE: Convertible coating compositions based on water soluble alkyd polymers
 AUTHOR(S): Trehan, Sumeet; Shukla, M. C.
 CORPORATE SOURCE: H.B. Technological Institute, Kanpur, India
 SOURCE: Paintindia (1994), 44(10), 41-7
 CODEN: PANTAH; ISSN: 0556-4409
 DOCUMENT TYPE: Journal
 LANGUAGE: English

L5 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1953:43074 CAPLUS
 DOCUMENT NUMBER: 47:43074
 ORIGINAL REFERENCE NO.: 47:7223c-f
 TITLE: Sulfosuccinic acid polyesters of fatty acid monoglycerides
 INVENTOR(S): Thurston, Jack T.
 PATENT ASSIGNEE(S): American Cyanamid Co.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2637663	---	19530505	US 1950-188485	19501004

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L5 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1995:292084 CAPLUS
 DOCUMENT NUMBER: 122:316964

ORIGINAL REFERENCE NO.: 122:57613a,57616a
 TITLE: Convertible coating compositions based on water soluble alkyd polymers
 AUTHOR(S): Trehan, Sumeet; Shukla, M. C.
 CORPORATE SOURCE: H.B. Technological Institute, Kanpur, India
 SOURCE: Paintindia (1994), 44(10), 41-7
 CODEN: PANTAH; ISSN: 0556-4409
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Water-thinned alkyd polymers were prepared by the monoglyceride process, using soybean oil, glycerol, and polybasic acid. Different alkyds from phthalic anhydride (I) and maleic anhydride, I and trimellitic anhydride, I and maleopimaric acid (II), and II alone were made. Methylated melamine-HCHO polymer was used as the curing agent. Thereafter, convertible coating compns. were prepared and their film properties were studied. The coating composition based on I and II with the melamine resin showed good results.

L5 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1992:517209 CAPLUS
 DOCUMENT NUMBER: 117:117209
 ORIGINAL REFERENCE NO.: 117:20295a,20298a
 TITLE: Oil-in-water emulsion-based additives for concrete for inhibiting the corrosion of reinforcing steel, concrete compositions containing the additives, and method for protecting reinforcing steel against corrosion
 INVENTOR(S): Bobrowski, Gregory S.; Bury, Mark A.; Farrington, Stephen A.; Nmai, Charles K.
 PATENT ASSIGNEE(S): Sandoz-Patent-G.m.b.H., Germany
 SOURCE: Ger. Offen., 4 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4140399	A1	19920617	DE 1991-4140399	19911207
CH 684002	A5	19940630	CH 1991-3617	19911209
FR 2670480	A1	19920619	FR 1991-15409	19911210
FR 2670480	B1	19950922		
JP 04275960	A	19921001	JP 1991-327371	19911211
JP 3264507	B2	20020311		
US 5262089	A	19931116	US 1991-805664	19911212
			US 1990-626349	A 19901212

PRIORITY APPLN. INFO.: ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The oil phase of the emulsion contains unsatd. fatty acid ester 10-55, ethoxylated C6-12-alkylphenol 1-15, and ester of aliphatic carboxylic acid and mono-, di-, or trivalent alc. 1-5, and the water phase saturated C12-30-fatty acid 0.1-5, ≥1 amino and ≥1 acid group-containing amphoteric compound 0.1-1, glycol 2-10, and soap 0.1-2 weight%. The emulsion is stable at ambient temperature and is added during the preparation of the concrete mix, in which it breaks because of the high pH to allow the active ingredients to contact the steel. An emulsion was prepared

consisting of cocoalkyl- β -aminopropionic acid 0.3, Bu oleate 21.0, propyleneglycol dioleate 8.0, ethoxylated (2 and 4 EO groups) nonylphenol 1.5 (each), stearic acid 0.6, lard monoglyceride 0.5, ethoxylated lard monoglyceride 2.5, propyleneglycol 8.0, Ca stearate 0.15, and water 55.95 weight%. Concrete was prepared consisting of type-I cement 217, fine aggregate 700, coarse aggregate 866, and water 105 kg. The emulsion was added to the concrete as a 50% dilution in an amount of 1.3 weight% (based on cement).

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

L5 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:427733 CAPLUS

DOCUMENT NUMBER: 1151:27733

ORIGINAL REFERENCE NO.: 1151:4881a,4884a

TITLE: Beta-monoglyceride manufacture by regioselective enzymatic hydrolysis of triglycerides in homogeneous water-chlorofluorocarbon solvent

INVENTOR(S): Mahler, Bruno; Graille, Jean; Pina, Michel; Montet, Didier

PATENT ASSIGNEE(S): Gattefosse S. A., Fr.

SOURCE: Fr. Demande, 10 pp.

CODEN: FRXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2648147	A1	19901214	FR 1989-8153	19890613
FR 2648147	B1	19910816		

PRIORITY APFLN. INFO.: FR 1989-8153 19890613

AB Triglycerides are enzymically hydrolyzed to β -monoglycerides in a homogeneous water-chlorofluorocarbon solvent. Thus, rape oil was dissolved in the acetone-water-trichlorotrifluoroethane ternary azeotrope and hydrolyzed with lipozyme (Mucor michei lipase) to prepare β - monoglyceride in approx. 100% yield.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:8583 CAPLUS

DOCUMENT NUMBER: 114:8583

ORIGINAL REFERENCE NO.: 1141:1635a,1638a

TITLE: Process for the manufacture of high fatty acid monoglyceride monosulfate detergents

INVENTOR(S): Ahmed, Fahim U.

PATENT ASSIGNEE(S): Colgate-Palmolive Co., USA

SOURCE: U.S., 7 pp. Cont.-in-part of U.S. 4,832,876.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4950440	A	19900821	US 1989-323461	19890314
US 4832876	A	19890523	US 1987-96102	19870914
ZA 8806654	A	19900530	ZA 1988-6654	19880907
AU 8821988	A	19890316	AU 1988-21988	19880908
AU 615209	B2	19910926		
GB 2209750	A	19890524	GB 1988-21309	19880912
GB 2209750	B	19920311		
CA 1310657	C	19921124	CA 1988-577101	19880912
JP 01104699	A	19890421	JP 1988-231387	19880914
BE 1001684	A3	19900206	BE 1988-1052	19880914

PRIORITY APPLN. INFO.: US 1987-96102 A2 19870914

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 114:8583

AB The title compds. MOSO₃CH₂CH(OH)CH₂O₂CR (M = alkali metal, ammonium, or triethanolamine; R = C₇-17 fatty alkyl) are prepared by treating glycerol in an aprotic solvent (e.g., CHCl₃) with a sulfating agent (e.g., ClSO₃H), treating the resulting glycerol trisulfate with a higher fatty acid or Me ester (e.g., hydrogenated coco acids) in an aprotic solvent, extracting the reaction mixture with a solvent (e.g., aqueous lower alc.) for the monoglyceride disulfate, and neutralizing and hydrolyzing with an aqueous agent to prepare the water-soluble detergent salt. The process requires only stoichiometric amts. of reagents, reducing the formation of inorg. sulfate byproduct and improving the yield of detergent.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1978:475227 CAPLUS

DOCUMENT NUMBER: 89:75227

ORIGINAL REFERENCE NO.: 89:11559a,11562a

TITLE: The synthesis of mono- and triglycerides of branched fatty acids and physical properties of the synthesized glycerides

AUTHOR(S): Aydin, Ahmet; Breusch, F. L.; Ulusoy, Emin

CORPORATE SOURCE: Fac. Chem., Istanbul Univ., Istanbul, Turk.

SOURCE: Chimica Acta Turcica (1977), 5(1), 93-101

CODEN: CATUA9; ISSN: 0379-5896

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 89:75227

AB Nine 1-monoglycerides of BuCHRCO₂H (I; R = C₂-10-n-alkyl) were prepared by heating 2,3-O-isopropylidenglycerol with I in xylene in the presence of p-MeC₆H₄SO₃H with azeotropic distillation of water of reaction, and the corresponding triglycerides were prep'd . by similar treatment of glycerol. The refractive indexes, dielec. consts. and dipole moments of all the glycerides and the surface tension of aqueous solns. of the monoglycerides were determined

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L5 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:64791 CAPLUS

DOCUMENT NUMBER: 51:64791

ORIGINAL REFERENCE NO.: 51:11764h-i,11765a-c
 TITLE: Synthetic resins and intermediates
 INVENTOR(S): Abel, Gerhard; Seifert, Ernst; Schreiber, Herbert
 PATENT ASSIGNEE(S): Rohm & Haas G. m. b. H.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 941815		19560419	DE 1951-R7555	19511108
AB	Dihydrodicyclopentadienyl vinyl ether (I), water-white, oily liquid, b12 107.5-8°, nD20 1.5088, d420 1.017, mol. refraction 51.74, obtained by treating dihydrodicyclopentadienyl alc. (II) with C2H2 in the presence of alkaline catalysts, is polymerized as such or in admixt. with similar polymerizable or condensable compds., possibly in the presence of the usual solvents or diluents. The resulting resinous polymers or polycondensation products find use in the manufacture of lacquers, foils, adhesives, binding agents, textile assistants, coating materials, and artificial leather. I is prepared by passing 25 l./hr. C2H2 for 4 hrs. through a vertically installed tube filled with a solution of 20 parts by weight Na in 700 parts II heated at 195-200°, extracting the cooled reaction mixture with water, and fractionating the organic layer in vacuo. I is recovered in 85% yield (730 parts by weight). A 2.5% SnCl4 solution (2 parts by weight) in benzene was added to 100 parts I at room temperature, and the mixture (maximum temperature about 50°) was allowed to stand at room temperature. A viscous, tacky, colorless, soft, resinous product (III), soluble in benzene, toluene, C6H4Me2, and CHCl3, insol. in petr. ether, MeOH, EtOH, BuOH, AcOEt, and Me2CO, not compatible with linseed oil, was obtained. Films prepared from a III solution in xylene by air-drying for 24 hrs. or by baking for 1 hr. at 100° are nontacky and particularly resistant to moisture. A clear, viscous, liquid polymer was prepared by polymerizing a (50:50) I-wood oil mixture in the presence of BF3-etherate (IV) or by polymerizing a (50:50) I-linseed oil mixture in the presence of IV. A product suitable as a starting compound in the manufacture of alkyd resins was prepared by polymerizing a (50:50) mixture of I and ricinenoyl monoglyceride. I was copolymerized in an aqueous emulsion along with CH2:CHCOOMe in the weight ratio of 5:20 in the presence of K2S2O8 and sulfonated castor oil to give a white, powdered copolymer which can be molded by pressing to plates and similar shaped articles.			

L5 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1953:43074 CAPLUS
 DOCUMENT NUMBER: 47:43074
 ORIGINAL REFERENCE NO.: 47:7223c-f
 TITLE: Sulfosuccinic acid polyesters of fatty acid
 monoglycerides
 INVENTOR(S): Thurston, Jack T.
 PATENT ASSIGNEE(S): American Cyanamid Co.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2637663	-----	19530505	US 1950-188485	19501004
AB	Softening agents for cotton and rayon, which are non-yellowing in storage and in hot-finishing treatments when used in concns. of 0.5-3.0%, have the general formula, $[OCCH(SO3Me)CH_2COOCH(CH_2OOCR)CH_2O]_n$; where R is an aliphatic radical containing 11-17 C atoms Me is a cation, and n is 2-10. R may be the residue of a fatty acid, e.g. lauric, myristic, palmitic, or stearic acid, or mixts. of fatty acids from tallow, coconut oil, cottonseed oil, etc. The polyesters are prepared by condensing equimol. proportions of the fatty acid monoglyceride with maleic acid, maleic anhydride, or fumaric acid, until an acid number of 40 or less is reached. The polymer is sulfonated by heating with an aqueous solution of an alkali or NH_4 -bisulfite or $Na_2S_2O_5$. For example, cottonseed acid monoglyceride 362, maleic anhydride 98, and 2,2'-methylenebis(6-tertbutyl-p-cresol) 5, were heated at 95-100° for 30 min. in a N atmospheric, to give a yellow oil. The temperature was raised to 175-186° for 130 min. in a N atmospheric. The acid number of the product was 43 and the average chain length 2.9 ester units. This polymaleate ester (350 g.) was sulfonated in 600 cc. Et_2O and 300 cc. H_2O with 34.5 g. $Na_2S_2O_3$ and 59 g. 97% $Na_2S_2O_5$. The reaction mixture was refluxed 78 hrs., and concentrated on a steam bath to a thick, viscous sirup to give a water-soluble, faintly opalescent, foaming solution			

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(FILE 'HOME' ENTERED AT 18:22:08 ON 04 MAR 2010)

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FILE 'CAPLUS, AGRICOLA' ENTERED AT 18:22:27 ON 04 MAR 2010
  914 S PREPARE? (S) MONOGLYCERIDE
L1      0 S L1 AND (CONTROL? (S) WATER (S) AFTER (S) REACTION)
L2      0 S L1 AND (MAINTAIN? (S) WATER (W) LEVEL)
L3      0 S L1 AND (WATER (4W) LEVEL)
L4      0 S L1 AND (WATER (4W) LEVEL)
L5      17 S L1 AND (WATER (S) REACTION?)

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD;Y
STN INTERNATIONAL LOGOFF AT 18:29:11 ON 04 MAR 2010

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